California Regional Water Quality Control Board Santa Ana Region

July 20, 2001

ITEM:

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SUBJECT:

Amending Waste Discharge Producer/User Water Reclamation Requirements for

Elsinore Valley Municipal Water District – Regional Water Reclamation Facility,

Order No. 01-70.

DISCUSSION:

On February 25, 2000, the Regional Board adopted Order No. 00-1, NPDES No. CA8000027 prescribing waste discharge requirements for Elsinore Valley Municipal Water District's Regional Water Reclamation Facility (District), for the discharge of tertiary treated wastewater to Temescal Creek.

Order No. 00-1 requires the District to conduct effluent monitoring for turbidity and coliform organisms as stipulated in Monitoring & Reporting Program No. 00-1. Findings 15, 16, and 17 contained in the order support the need for the effluent quality to be equivalent to tertiary treatment. However, limits for turbidity and coliform organisms were inadvertently omitted from Order No. 00-1.

Order No. 01-70 amends Order No. 00-1 by adding Discharge Specification 2, which specifies limits for turbidity and coliform organisms. Compliance Determination 10 and 11 will also be added, which describe how compliance with the new Discharge Specification will be determined.

RECOMMENDATION:

Adopt Order 01-70, as presented.

Comments were solicited from the following agencies:

U.S. Environmental Protection Agency, Permits Issuance Section (WTR-5) - Terry Oda

U.S. Army District, Los Angeles, Corps of Engineers, Regulatory Branch

U.S. Fish and Wildlife Service - Carlsbad

State Water Resources Control Board, Office of the Chief Counsel - Ted Cobb

State Water Resources Control Board, Division of Water Quality- James Kassel

State Water Resources Control Board, Division of Clean Water Programs - Lynn E. Johnson

State Department of Health Services, Santa Ana – Frank Hamamura

State Department of Health Services, Santa Barbara - Jeff Stone

State Department of Health Services, San Diego - Toby Roy

State Department of Water Resources - Glendale

Regional Water Reclamation Facility

State Department of Water Resources - Glendale
State Department of Fish and Game - Long Beach
Orange County Water District - Nira Yamachika
City of Lake Elsinore - City Manager
City of Canyon Lake - City Manager
Riverside County Flood Control and Water Conservation District
Riverside County Department of Environmental Health Services
Santa Ana River Dischargers Association
Santa Ana Watershed Project Authority - Joseph Grindstaff
Montgomery Watson - Jeff Mohr

California Regional Water Quality Control Board Santa Ana Region

ORDER NO. 01-70

Amending Order No. 00-1, NPDES No. CA8000007
Waste Discharge and Producer/User Reclamation Requirements

For the
Elsinore Valley Municipal Water District
Regional Water Reclamation Facility

Riverside County

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter, Board), finds that:

- 1. On February 25, 2000, the Board adopted Order No. 00-1, NPDES No. CA8000027, prescribing Waste Discharge and Producer/User Reclamation Requirements for Elsinore Valley Municipal Water District's Regional Water Reclamation Facility for the discharge of tertiary treated wastewater to Temescal Creek.
- 2. Order No. 00-1 contains Finding 15, 16, and 17, which support the need for the effluent quality to be equivalent to tertiary treatment.
- 3. Turbidity and Coliform Organisms in its (based on tertiary treatment standards) were inadvertently omitted from Order No. 20-01.
- 4. Order No. 00-1 needs to be revised to include effluent limits to assure that the effluent quality meets tertiary treatment standards.
- 5. In accordance with Water Code Section 13389, amending the waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13 of the Public Resources Code.
- 6. The Board has notified the discharger and other interested agencies and persons of its intent to arrand waste discharge for the discharge and has provided them with an opportunity to submit their written views and recommendations.
- 7. The Roard, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT Order No. 00-1 be amended as follows:

- 1. Add Discharge Specification No. 2, as follows
 - 2. The discharge shall at all times be a filtered and subsequently disinfected wastewater.
 - a. Filtered wastewater means an oxidized wastewater that meets either (1) or (2):

- (1) Has been coagulated and passed through natural undisturbed soils or a bed of filter media pursuant to the following:
 - (a) At a rate that does not exceed 5 gallons per minute per square foot of surface area in mono, dual or mixed media gravity, upflow or pressure filtration systems, or does not exceed 2 gallons per minute per square foot of surface area in traveling bridge automatic backwash filters, based on peak dry weather design flow; and
 - (b) The turbidity of the filtered wastewater does not exceed any of the following:
 - i. An average of 2 Nephelometric Turbidity Unit (NTU) within any calendar day.
 - ii. 5 NTU more than 5 percent of the time within any calendar day; and
 - iii. 10 NTU at any time³.
- (2) Has been passed through a microfiltration, ultrafiltration, nanofiltration, or reverse osmosis membrane so that the turbidity of the filtered wastewater does not exceed any of the following:
 - (a) 0.2 NTU more than 5 percent of the time within any calendar day; and
 - (b) 0.5 NTU at any time.
- b. Disinfected wastewater shall mean a filtered wastewater that has been disinfected and meets the following criteria:
 - (1) The filtered wastewater has been disinfected by either:
 - (a) A chlorine disinfection process following filtration that provides a CT (the product of total chlorine residual and modal contact time measured at the same point) value of not less than 450 milligramminutes per liter at all times with a modal contact time of at least 90 minutes, based on peak dry weather design flow; or
 - (b) A disinfection process that, when combined with the filtration process, demonstrates inactivation and/or removal of 99.999 percent of the plaque-forming units of F-specific bacteriophage MS2, or polio virus in the wastewater. A virus that is at least as resistant to

See Section H.10., "Compliance Determination."

disinfection as polio virus may be used for purposes of the demonstration. Where ultraviolet (UV) disinfection is used for disinfection, UV disinfection shall deliver under worst operating conditions a minimum UV dose of 140 milli-watts seconds per square centimeter (mW-s/cm2) at maximum weekly flow and 100 mW-s/cm2 at peak flow (maximum day), unless otherwise approved by the Department of Health Services.

- (2) The average weekly concentration of total coliform bacteria measured in the disinfected effluent shall not exceed an MPN of 2.2 per 100 milliliters. The average weekly concentration shall be evaluated using the median of the bacteriological results of the last seven days⁴.
- (3) The number of total coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any calendar month.
- 2. Add Compliance Determinations 10 and 11, as follows
 - 10. Exceedances of the "10 NTU at any time" turbidity requirement referenced in Discharge Specifications A.2.(1)(b)iii. shall not be considered a violation of these waste discharge requirements if such exceedance does not exceed a duration of one minute. The discharger shall not be considered to be in violation of this requirement if the apparent exceedance was caused by interference with, or malfunction of, the monitoring instrument. If the discharger is using a properly operating backup turbidimeter, the reading of the backup turbidimeter shall be considered in determining whether there has been an actual noncompliance.
 - 11. Compliance with the weekly average total coliform limit expressed in Discharge Specification A.2.b.(2) shall be based on a running median of the test results from the previous 7 days. To comply with the weekly average limit, the 7-day median MPN must not exceed 2.2 per 100 milliliters on any day during the week. However, only one violation is recorded for each week, even if the 7-day median MPN value is greater than 2.2 for more than one day in the week.
- 3. Renumber Discharge Specifications numbers 2, 3, 4, 5, and 6 of Order No. 00-1 to 3, 4, 5, 6, and 7, respectively.
- 4. Renumber Footnotes 3, 4, 5, 6, 7, 8, 9, and 10 of Order No. 00-1 to 5, 6, 7, 8, 9, 10, 11, and 12, respectively.
- 5. All other conditions and provisions of Order No. 00-1 shall remain unchanged.

See Section H.11., "Compliance Determination."

I Gerard J. Thibeault, Executive Officer, do hereby certify that the forgoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on July 20, 2001.

Gerard J. Thibeault Executive Officer